

The Future of Strategic Brownfield Regeneration in England – Between Urban Intensification and Green Infrastructure Provision

Andreas Schulze Bäing

(Dr Andreas Schulze Bäing, Centre for Urban Policy Studies, University of Manchester, andreas.schulzebaing@manchester.ac.uk)

1 ABSTRACT

The reuse of brownfield land is an important objective of planning and regeneration policies in many countries. In England this has been a key component of the urban renaissance agenda since the late 1990s. The national target for England to provide by 2008 a minimum of 60% of new housing on previously developed land (PDL) (Adams 2004) has been well exceeded with an estimated 90% of dwellings (including conversions) built on PDL in 2009 (CLG 2010). While on the one hand this can be seen as a success of a target-driven regional and national planning policy supported by a restriction of greenfield development in the open countryside, one can also argue that this urban intensification policy came at the cost of a lack of green infrastructure development within urban areas, an approach advocated by many landscape planners as part of the provision of social infrastructure.

The first two parts of this paper discuss the last decade of strategic brownfield land redevelopment across England both in terms of policy context and by showing the patterns of change using data from the Land Use Change Statistics and the National Land Use Database for Previously Developed Land. This part of the paper is based on analyses produced for projects with the Homes and Communities Agency and the Housing and Neighbourhood Monitor of the Joseph Rowntree Foundation. Following on from this quantitative analysis, the following part of the paper discusses future policy options and related strategies of local authorities in the light of both national targets for housing provision on PDL and local environmental green-space considerations. This is based on a series of expert interviews conducted in summer 2009. The concluding section also considers the most recent policy changes. Although the themes discussed in this paper focus on England, they are relevant for planning and regeneration in other countries as well. In Germany for example targets for reducing the use of greenfield land for housing and the regeneration of brownfield sites have become important policy themes over recent years, and there are important lessons to be learnt from the experiences in England.

2 THE POLICY CONTEXT FOR BROWNFIELD REGENERATION

The strategic reuse of brownfield land has been a key element of urban regeneration in the England since the late 1990s. Although many of the original policy aspirations were targeted at the whole UK, due to the devolution process this paper focuses on the policy context and patterns of change in England. The urban renaissance agenda (Urban Task Force 1999; DETR 2000) and the government's sustainable development strategy (DETR 1999) introduced the target of building 60% of new housing on previously developed land or through conversion of existing buildings. *Planning Policy Guidance 3: Housing* (2000) stated that this 60% target would be achieved by 2008 with each region proposing their own land recycling target to contribute to this global target for England (DETR 2000).

In addition to the brownfield reuse policy for housing, a similar policy approach was adopted by the government towards retail planning to discourage retail development in greenfield urban fringe locations. The introduction of the sequential approach towards retail planning in *Planning Policy Guidance 6* in 1996 (now part of *Planning Policy Statement 6*) has encouraged the reuse of vacant land and buildings for retail use in integrated locations, which in many cases would be previously used sites or buildings (Department of the Environment 1996).

Another important policy component has been the Sustainable Communities Plan developed by the national regeneration agency English Partnerships (now the Homes and Communities Agency) and the Office for the Deputy Prime Minister (now Communities and Local Government, quasi the planning ministry) in 2003. The plan set a target for Regional Development Agencies and English Partnerships to remediate 1,400 ha of brownfield land per year for economic, commercial, residential and leisure use (ODPM 2003).

Furthermore in 2003 the UK Government announced that a strategic approach was needed to specifically tackle the problems associated with the most difficult previously developed land. The National Brownfield

Strategy for England was researched and prepared between 2003 and 2007 by a team drawn jointly from the Office of the Deputy Prime Minister and English Partnerships, receiving Ministerial approval in March 2008. All of these policy initiatives aimed to ensure that, whenever possible, land is reused in sustainable ways to provide for the needs of an expanding population and projected increases in household formation.

One can identify two main rationales behind these various policies of strategic brownfield regeneration:

- The first rationale has an environmental focus. The strategic reuse of brownfield land reduces the extent of urban sprawl and pressure on greenfield development. At the same time, this is hoped to contribute towards the development of a more compact urban form to enable more work and leisure trips of shorter distance and with more sustainable journey modes such as walking, cycling and public transport. The compact city idea was a prominent debate in the 1990s (Jenks, Burton et al. 1996) and this more recent environmental rationale of the compact city is strongly linked to the long-established land use planning concept of urban containment (Hall 1974). The objective of urban containment is to reduce the need for, and pressure on, urban expansion on greenfield land, though one should mention that the latter concept is more concerned with protecting the countryside from urbanisation.
- The second rationale of the strategic reuse of brownfield land is an important element of wider urban regeneration objectives. It takes into account the regeneration needs of deprived urban areas and of making urban living attractive for wider parts of the population, as argued for in the urban renaissance report (Urban Task Force 1999). Part of this policy, the regeneration of deprived urban areas, has a long history since the post-war slum clearances (Yelling 2000), though these have supported further urban expansion in the form of urban extensions and the development of new towns. Later years saw various other more cautious area regeneration initiatives from the late 1970s onwards (e.g. Inner Urban Areas Act) through to the 1990s (e.g. the Single Regeneration Budget). While these earlier programmes managed to foster regeneration in specific areas, they did not manage to stop the wider processes of sub- and counter urbanisation. Many urban areas continued to face depopulation while more rural areas and small towns witnessed population increase (Champion, Atkins et al. 1998). Many major urban areas showed population decline in this period, while many areas in the South-East (particularly those areas surrounding London) and towards the South-West showed population growth (Wong, Rae et al. 2006).

The commitment of the urban renaissance agenda was to reverse the previous patterns of counter-urbanisation and to attract households back to urban areas. This has provided the policy agenda for having a more compact urban structure and has subsequently found its way into the spatial planning policy in England. Though some of the brownfield policy documents such as the national brownfield strategy argued for a differentiated approach towards brownfield regeneration considering all types of reuse types including soft end uses contributing to green infrastructure, in practice there was a strong focus on so-called hard end use, mostly housing.

3 A DECADE OF STRATEGIC BROWNFIELD LAND REDEVELOPMENT – THE PATTERNS OF CHANGE

The policy target of developing at least 60% of housing on previously developed land is being monitored by the Land Use Change Statistics (LUCS), based on data from the continuous map revision process of the Ordnance Survey. According to these statistics, the brownfield housing reuse figure has risen from 57% in 1996 to 77% in 2007 and to the latest 80% based on provisional estimates for 2009 (CLG 2010). Another policy target set by the government is the density of new residential developments. This has risen from an average of 25 dwellings per ha in 1996 to 41 dwellings per ha in 2006 and to a provisional estimate of 43 dwellings per ha in 2009 (CLG 2010). Both the brownfield and dwelling density figures indicate that the land-reuse policies in England, both in terms of their efficiency and effectiveness, have proved to be successful in terms of meeting the government's overall policy targets.

A closer examination of the land use change data (see Figure 7) shows that the rising share of brownfield land developed for residential use since 2000 is largely due to a major decrease in residential development on greenfield (not-previously-developed) land. It is important to note that the absolute annual figures for



residential development on brownfield (previously-developed) land remain at a similar level compared to the 1990s.

More recently the downturn in the property market since the end of 2007 documented in statistics about housing completions (CLG 2009) will most likely lead to even lower rates of land changing to residential use.

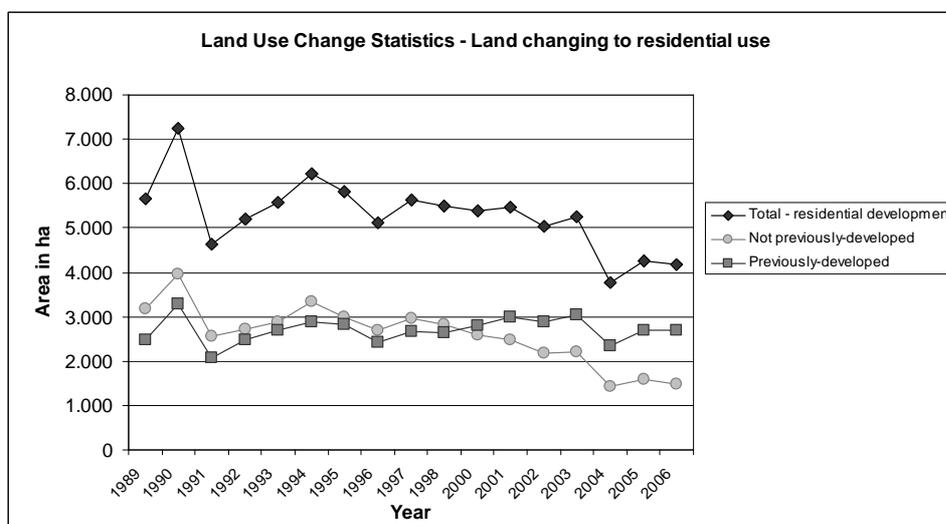


Figure 7: Land changing to residential use, based on figures from the Land Use Change Statistics

These figures, however, tend to conceal regional variations, as the availability of brownfield land varies greatly across England. While the proportion of residential development on brownfield land across England increased from 55% to 69% between 2001 and 2008, this was distorted by the situation in London. Being a highly urbanised conurbation, 89-94% of residential land in London came from brownfield sources between 2001 and 2008 (see Figure 8).

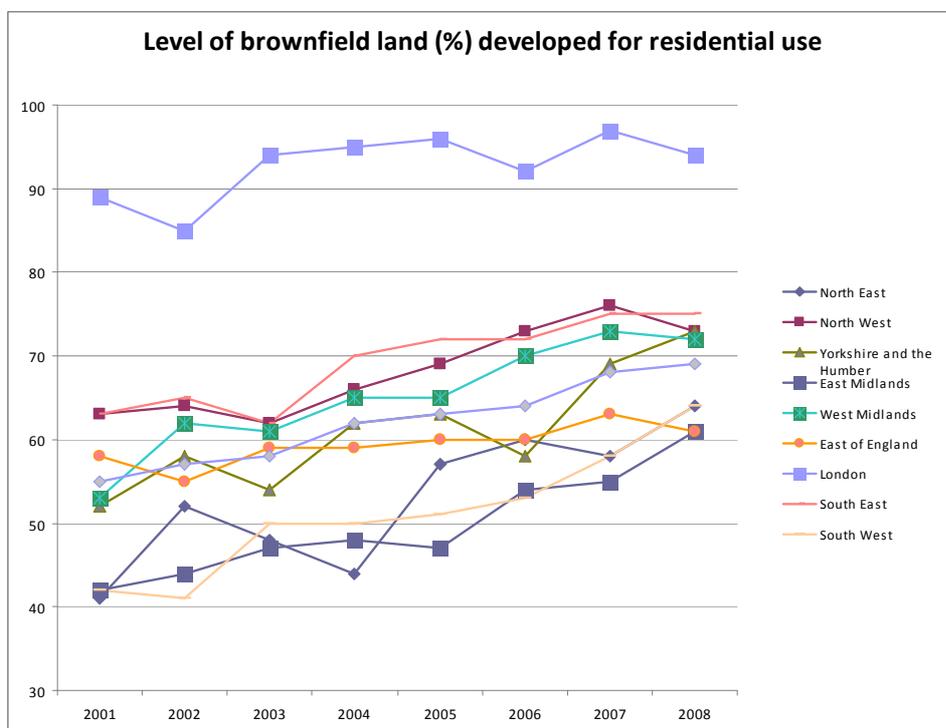


Figure 8 Brownfield land developed for residential use by region. Source: Land Use Change Statistics, Table P224

Besides London, the South East (which has high housing demand) and the North West and the West Midlands (which both have a large amount of brownfield land in relation to their industrial legacy) have consistently experienced a large proportion of brownfield land reuse for residential development. It is, however, surprising to note that other regions with significant amounts of brownfield land, most notably the

North East, are not showing a similarly high proportion of brownfield land reuse. This is probably related to the fact that less than half of the brownfield sites in this region were deemed as suitable for housing by the local authorities in NLUD surveys. The situation of Yorkshire and the Humber has been fluctuating, though it has caught up with the North West recently.

The less industrialised regions, such as the East Midlands and the South West, tend to have lower levels of residential reuse of brownfield land, which is probably related to their lack of brownfield stock. It is, however, somewhat surprising to find that the East of England has outperformed the East Midlands in using brownfield land for housing development. Figure 8 also shows that there are early signs of a relative reduction in the use of brownfield land for housing development in most regions since the economic downturn in 2007.

The Government’s definition of brownfield land has been rather broad, and includes any previously developed land ranging from desirable public green space such as playing fields and gardens through to former housing sites and more problematic vacant and derelict land (in many cases including contaminated former industrial sites). This means that there might be differences in the extent of contamination of brownfield sites between different regions and thus varying levels of suitability for housing. Sites previously used for mining and related heavy industries such as coking plants, steelworks or chemical industries are more likely to be heavily contaminated than former cotton mills or manufacturing sites.

In light of this definition, a high proportion of brownfield land reuse as measured with the LUCS statistics does not necessarily indicate a major contribution towards sustainable urban regeneration as the land reused will also include more desirable green spaces as well as contaminated land.

A more detailed analysis of the *types* of brownfield land being reused for housing is shown in Figure 9. Despite the fact that the North East’s overall proportion of brownfield land residential reuse is amongst the lowest in England, it has been most successful in recycling vacant and derelict land (34% of all land used for residential use) and keeping land available for employment use.

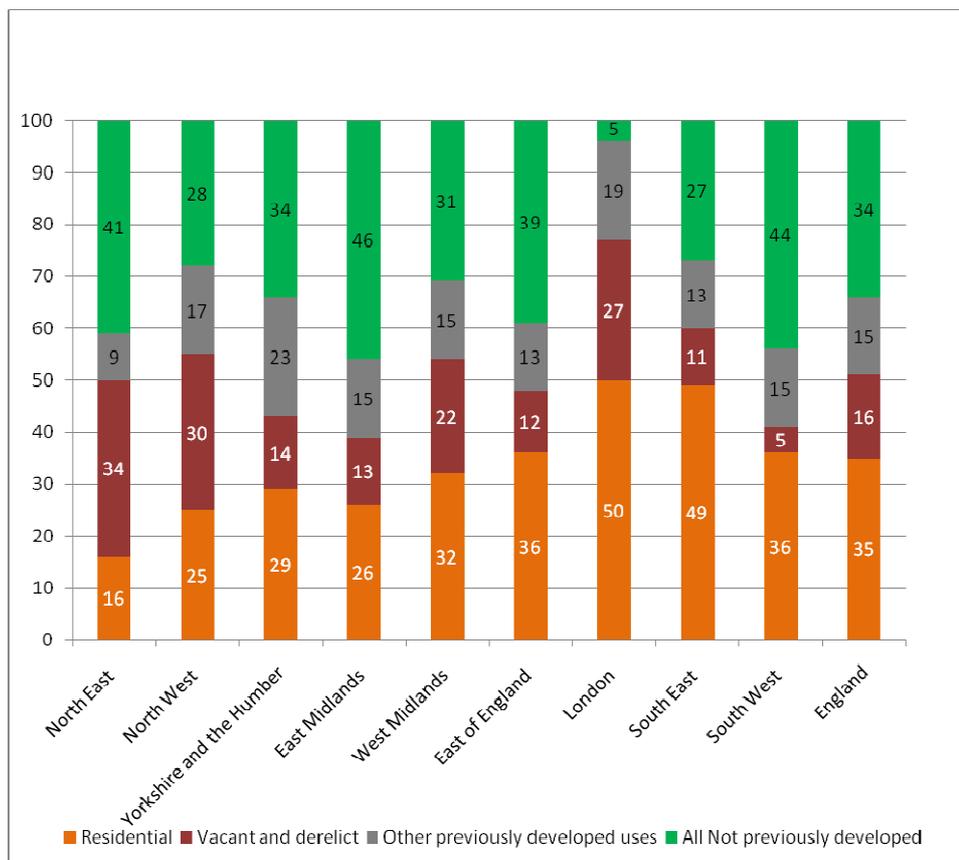


Figure 9 Brownfield land types residential use by region, 2005-2008. Source: Land Use Change Statistics, Table P225

This is then followed by the North West (30%) and London (27%). However, the West Midlands (22%) and Yorkshire and the Humber (14%) have not been performing that well in shifting vacant and derelict land.



The South East (49%), the South West (36%) and the East of England's (36%) brownfield residential land sources have been dominated by former residential land, including garden space.

Most brownfield sites are located in urban areas and deemed as suitable for high density housing development. With the pressure of meeting the housing delivery targets, high density brownfield development has been supported by local authorities to contribute to the urban renaissance agenda. Besides the established green belt policy, high density compact redevelopment has also served as a tool for urban containment and reducing the extent of urban sprawl and pressure on greenfield development. Figure 10 shows that the average dwelling density in England has increased from 31 dwellings per ha in 2001-04 to 42 in 2005-08. However, the most stark increase in dwelling density was found on sites that were previously vacant and derelict (from 39 to 68); used for other forms of development (such as transport and utilities, industrial and commercial use) (from 46 to 71); and for minerals, landfill and defence use (from 28 to 51).

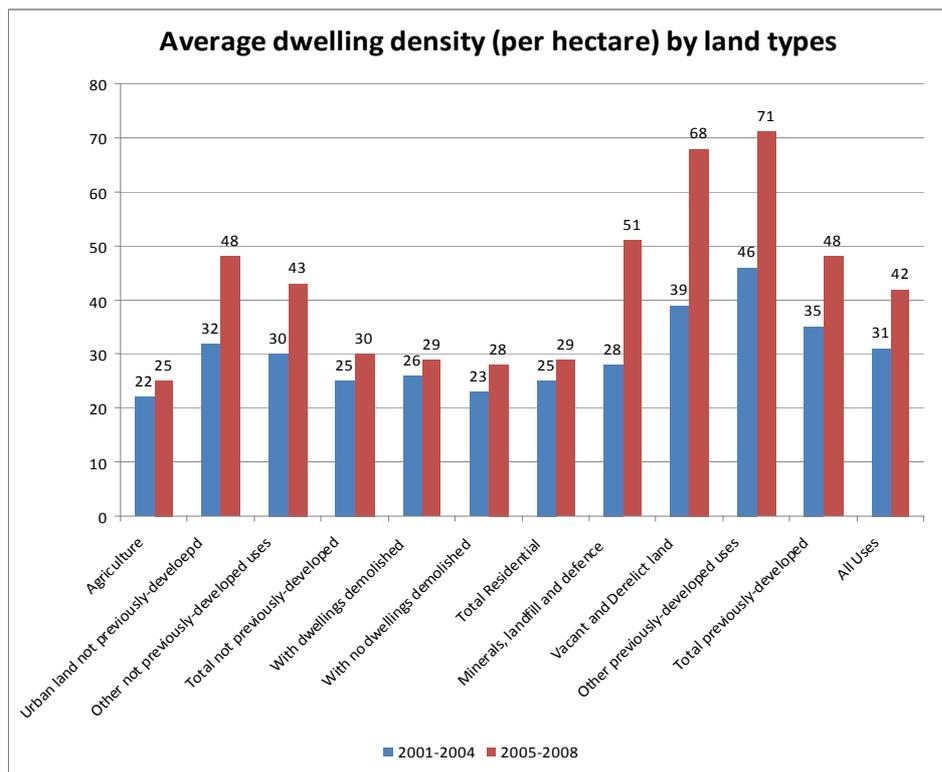


Figure 10 Average dwelling density by land types. Source: Land Use Change Statistics, Table P223

3.1 Key policy issues and challenges in England as a whole and its different regions

The analysis so far suggests that the patterns and extent of brownfield land reuse for housing development vary greatly across the regions. The North West and London have been performing well in terms of shifting development from greenfield to brownfield land as well as making use of more problematic vacant and derelict land. The North East has been particularly good at recycling vacant and derelict land, but the overall proportion of land used for residential development that is brownfield rather than greenfield land is lower. By contrast, brownfield land reuse in the South East and the East of England tends to be related to the redevelopment of previous residential sites. In the southern part of the country, the reuse of brownfield land has a stronger environmental focus on reducing urban sprawl. This means that it is more concerned with managing household growth rather than pursuing urban regeneration objectives (Carmona 2001).

4 BROWNFIELD REGENERATION AT THE CROSSROADS – A RENAISSANCE FOR GREEN INFRASTRUCTURE PROVISION ON BROWNFIELD LAND?

Having established the general policy context and development patterns of brownfield land over recent years, this section explores the role that brownfield regeneration can play in the development of green infrastructure, considering the strong focus on hard-end use of brownfield land over recent years. The findings in this section are based on a series of 14 in-depth interviews conducted between April and July 2009 mainly with representatives of planning and regeneration of local authorities, while also including the

views of a planner working for a master developer of brownfield sites, a planner working for a planning and urban design practice and a consultant involved in various brownfield regeneration studies and projects.

4.1 Brownfield reuse for green infrastructure

Many interviewees expressed that it has become increasingly difficult to find support and funding for the redevelopment of brownfield sites for soft end use to contribute to green infrastructure, as the policies and funding streams prefer hard end uses. The team leader spatial planning from Bolton Council expressed the view that there was now very little reuse of brownfield land for soft end uses whereas there was much more 20 or 30 years ago. He explained that “There was a major programme of regenerating river valleys in Greater Manchester. Some of them were still in open uses, but a lot of these had old mills and factories on them along the river. A lot of those were reclaimed for open uses. But that's something that hasn't happened since then. This is largely because there is no money for public sector intervention to achieve soft end uses. So that isn't happening really. So brownfield land is only being used for hard development. I could probably think of one or two exceptions ... but I can't think of any in the last few years which have been reclaimed and then used for greenfields. This will be continuing as it is, unless there is a major new source of funding ... we want to see more green infrastructure in locations where brownfield land can provide it.”

On the other hand some interviewees expressed concern that it is important to decide about the location of green/soft end use not by the location of the most difficult to develop brownfield sites but by the ideal location in its immediate and wider spatial context. Otherwise there is a danger of creating poor quality, difficult to maintain structures of green space. The director of planning at a master developer expressed the view “Examples of soft end-use for a long-term have been poor, it reduces options in deprived areas, a soft use is only positive if it is going to be used. Brownfield land is an accident of history; it is there because something went there before. A park has to be in the right place, and not simply where the brownfield site happens to be.”

The head of regeneration & economic development at a consultancy commented that green infrastructure “Could be used more effectively especially in deprived areas. Grassing, shrubs and plants; there is a lot of potential. Good examples up and down the country”.

The economic manager Wirral Waterfront agreed that “green infrastructure is an important element of brownfield reuse in deprived areas [and gave an example of] "living through change" in housing market renewal zones. This Created green spaces where cleared terraced house areas meet main roads. In his view these created a “very positive impact” but he noted “it is increasingly difficult to get funding for projects that lead to or contribute to green infrastructure”.

The director of planning from Liverpool Vision expressed the view that it can be “beneficial to provide green infrastructure in deprived areas. But it does not solve the root problems of the areas”. She added that it is a policy that Liverpool adopted for quite a long time, creating playing fields, temporary grassing and planting trees on derelict sites. Although she stressed “In the short term it makes an area look and feel better, but doesn't deal with the underlying problems. We are doing less of it in Liverpool and trying to think about doing things that are actually going to create jobs.”

4.2 Potential for improvement of brownfield regeneration policies

As noted above, a number of interviewees expressed the view that there is more need for gap funding to make redevelopment of brownfield land viable in the current market conditions. Another concern was the phenomenon of land banking waiting for a development to happen. Here stronger instruments for the local authority would be welcomed, to require and enforce development on a site that has been granted planning permission for development.

Several of the interviewees expressed views that central government could do more to intervene and provide support at the local level, with the interviewee from Wirral expressing the view that the Land Remediation Programme is currently not fully used. He said “This programme does not appear to offer local authorities the kind of freedom to do soft end remediation; it does not seem to be as flexible to aim at non hard end use outcomes. It is focused on hard end use. That might change.”

The interviewees generally seemed to recognise that small sites and large sites bring with them different sets of problems, which may need to be tackled with different policies. The town planner at a planning and urban



design practice stated that “small scale sites are important”. He added “Some brownfield land is already re-vegetated, [it] looks quite nice, flora and fauna, rare species, with fine tuning you could enhance that habitat, turn it into an eco-park. People like the idea, but no one seems to be really fancying it around the country. [There are] small little pocket parks here and there. Greenwich peninsula is one example. But bringing it into neighbourhoods? [There is] potential for little parks. This would not cost a lot of money, but bring a lot of benefit for people living around it.”

5 CONCLUSION

This paper has illustrated the focus on a target driven hard end use of brownfield land, specifically for residential use, over recent years in England. While this has certainly had positive effects, such as the reduction of urban sprawl and the contribution towards urban regeneration objectives, the interviews with regeneration experts have shown that there is a greater interest in a more differentiated approach towards brownfield regeneration and a renewed interest in using brownfield regeneration for green infrastructure provision. This takes into account that the regeneration of urban green space qualified as previously developed land for new housing can have negative consequences on environmental quality and result in the problems of town cramming and the phenomenon of “garden grabbing” (development of back gardens for housing) as well as potential incompatibility of new developments with the character of some mature residential neighbourhoods. More recently the new UK coalition government of Conservatives and Liberal Democrats revised some of the previous planning policies, such as the qualification of back gardens as previously developed land and the minimum density requirements within planning policy statement 3 (CLG 2010). The de-facto abolition of regional planning and housing targets by the new coalition government and the publication of the draft localism bill in December 2010 indicate a much more localised future approach towards planning and brownfield regeneration. On the hand this will provide planners, regeneration experts and local communities much more independence to decide about the future use of brownfield sites, including the possibilities of a soft end-use. But, as the interviews conducted in this paper have shown, such measures often rely on financial support, which is unlikely given the current state of public finances and the process of public funding cuts.

6 REFERENCES

- Adams, D. (2004). "The changing regulatory environment for speculative housebuilding and the construction of core competencies for brownfield development." *Environment and Planning A* 36(4): 601-624.
- Carmona, M. (2001). "Implementing urban renaissance--problems, possibilities and plans in South East England." *Progress in Planning* 56(4): 169-250.
- Champion, T., D. Atkins, et al. (1998). *Urban Exodus*, Council for the Protection of Rural England.
- CLG. (2009). "House Building: Revised June Quarter 2009, England." Retrieved 09/11/2009, 2009, from <http://www.communities.gov.uk/publications/corporate/statistics/housebuildingq22009rev>.
- CLG. (2010). "Communities and Local Government: Previously Developed Land and Density – statement by the Minister for Decentralisation." Retrieved 30/03, 2011, from <http://www.communities.gov.uk/statements/corporate/pps3statement>.
- CLG (2010). *Land Use Change Statistics (England) 2009 – provisional estimates July 2010*.
- Department of the Environment (1996). *Planning Policy Guidance 6: Town Centres and Retail Developments*. London, HMSO.
- DETR (1999). *A better quality of life - a strategy for sustainable development in the UK*. London, Department of the Environment, Transport and the Regions.
- DETR (2000). *Our Towns and Cities: The Future - Delivering and Urban Renaissance*. London, Department of the Environment, Transport and the Regions.
- DETR (2000). *Planning Policy Guidance Note 3*. London, Department of the Environment, Transport and the Regions.
- Hall, P. (1974). "The Containment of Urban England." *The Geographical Journal* 140(3): 386-408.
- Jenks, M., E. Burton, et al. (1996). "The Compact City: A Sustainable Urban Form?"
- ODPM (2003). *Sustainable Communities: building for the future*. London, Office of the Deputy Prime Minister.
- Urban Task Force (1999). *Towards an Urban Renaissance*. London, E & FN Spon.
- Wong, C., A. Rae, et al. (2006). *Uniting Britain - The evidence base - spatial structures and key drivers*. London, RTPI.
- Yelling, J. (2000). "The incidence of slum clearance in England and Wales, 1955-85." *Urban History* 27(2): 234-254.